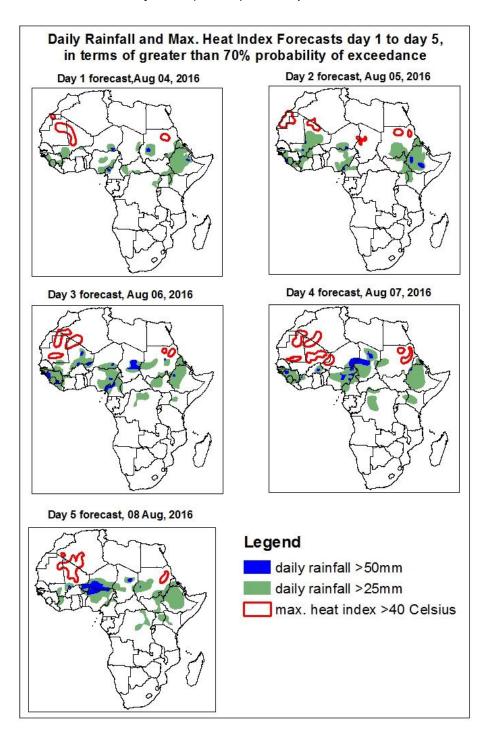
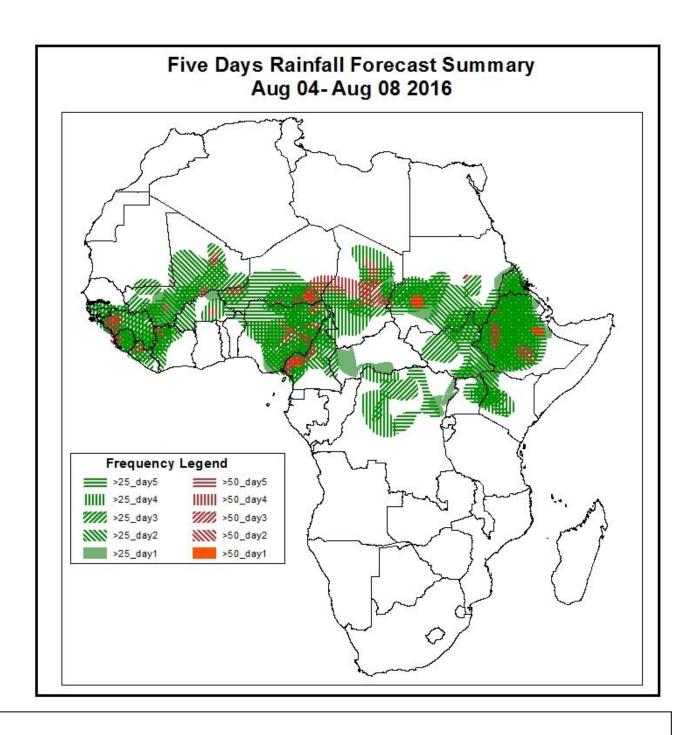
- 1. Rainfall, Heat Index and Dust Concentration Forecasts, (Issued on Aug 03, 20216)
- 1.1. Daily Rainfall and Maximum Heat Index Forecasts (valid: Aug 04–Aug 08 2016)

 The forecasts are expressed in terms of high probability of precipitation (POP) and high probability of maximum heat index, based on the NCEP/GFS, ECMWF and the NCEP Global Ensemble Forecasts System (GEFS) and expert assessment.



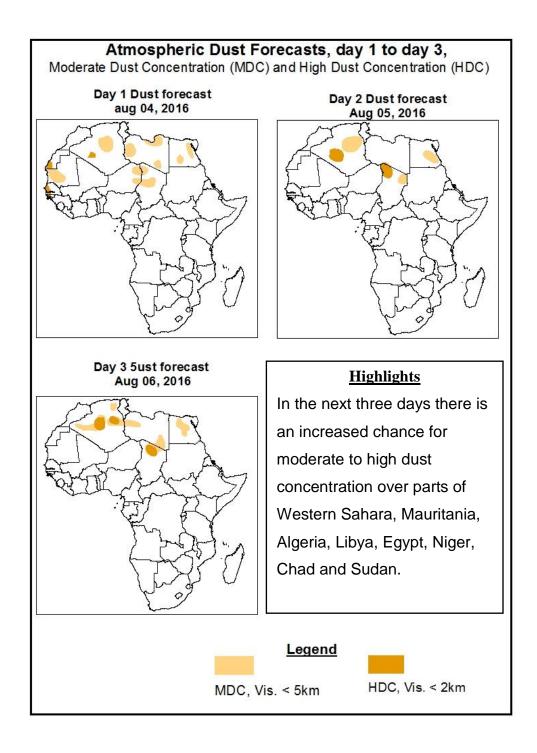


Highlights

In the next five days, westward propagating lower-level cyclonic systems across West Africa and lower level wind convergences across the central and eastern Sahel, Sudan and Ethiopia are expected to enhance rainfall in their respective regions. Therefore, there is an increased chance for two or more days of moderate to heavy rainfall over portions of Mali, southern Senegal, Guinea Bissau, Guinea and Sierra Leone, portions of Liberia and Cote d'Ivoire, local areas of eastern Burkina Faso, portions of Niger, Nigeria, Chad, Cameroon, Sudan, South Sudan, Uganda, Kenya and Ethiopia, and Eritrea.

1.2. Atmospheric Dust Concentration Forecasts (valid: Aug 04– Aug 06 2016)

The forecasts are expressed in terms of high probability of dust concentration, based on the Navy Aerosol Analysis and Prediction System, NCEP/GFS lower-level wind forecasts and expert assessment.



1.3. Model Discussion, Valid: Aug 04 – Aug 08, 2016

The Azores high pressure system over the Northeast Atlantic is expected to maintain an average central pressure value of 1024-hPa during the forecast period.

The St. Helena High pressure system over the Southeast Atlantic Ocean is expected to weaken, with its central pressure value decreasing from 1030-hPa to 1026-hPa though 24 to 72 hours, and tends to intensity, with its central pressure value increasing from 1027-hPa to 1029-hPa though 96 to 120 hours.

The Mascarene high pressure system over the Southwest Indian Ocean is expected to weaken, with its central pressure value decreasing from 1030-hPa to 1028-hPa during the forecast period.

The 1016mb isobar, associated with the East African ridge is expected to remain near the latitudes of Ethiopia during the forecast period.

The central pressure values associated with the heat low in western Sahel and the central Sahel is expected remain in the range between 1004hPa and 1007hPa during the forecast period, while the central pressure value associated with the heat low across Sudan is expected remain in the range between 1004hPa and 1006hPa during the forecast period.

At 925hPa an anticyclonic circulation and its associated ridge is expected to prevail across Libya while expanding westward into neighboring regions during the forecast period. Strong wind associated with this system may lead to moderate to high dust concentration across portions of Western Sahara, Mauritania, Algeria, Libya, Egypt, Niger, Chad and Sudan.

At 850hPa level, a cyclonic circulation is expected to propagate westwards in the region between Sudan and Mali during the forecast period.

At 700hPa level, a cyclonic trough in the easterly flow is expected to propagate westwards between Nigeria and Guinea through 24 to 120 hours, followed by a new trough approaching Nigeria towards end of the forecast period.

In the next five days, westward propagating lower-level cyclonic systems across West Africa and lower level wind convergences across the central and eastern Sahel, Sudan and Ethiopia are expected to enhance rainfall in their respective regions. Therefore, there is an increased chance for two or more days of moderate to heavy rainfall over portions of Mali, southern Senegal, Guinea Bissau, Guinea and Sierra Leone, portions of Liberia and Cote d'Ivoire, local areas of eastern Burkina Faso, portions of Niger, Nigeria, Chad, Cameroon, Sudan, South Sudan, Uganda, Kenya and Ethiopia, and Eritrea.

There is an increased chance for maximum heat index to exceed 40°C over portions of Western Sahara, Mauritania, Mali and Niger, local areas in Chad and Sudan.

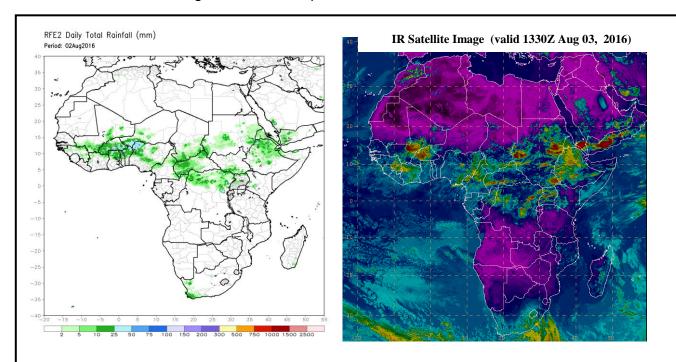
2.0. Previous and Current Day Weather over Africa

2.1. Weather assessment for the previous day (Aug 02, 2016)

Moderate to locally heavy rainfall was observed over portions of Senegal and Mali, Guinea, northern Cote d'Ivoire Ghana, Togo, and Benin, portions of Niger, Nigeria, Cameroon, Chad, CAR, Sudan, South Sudan and DRC, local areas of western South Africa and eastern Kenya, portions of Uganda, Ethiopia and Eritrea.

2.2. Weather assessment for the current day (Aug 03, 2016)

Intense convective clouds are observed over local areas of southern Guinea, central Mali, portions of Burkina Faso, local areas of central Nigeria, portions of Cameroon, CAR, DRC, Sudan, South Sudan, Uganda and Ethiopia.



Previous day rainfall condition over Africa (Left) based on the NCEP CPCE/RFE and current day cloud cover (right) based on IR Satellite image.

Author: Fatoumata Sangho, (Mali-Meteo) / CPC-African Desk); fatoumata.sangho@noaa.gov